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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,985

12/21/2004

Xavier Muldermans

L0008/US

3187

30522

7590

03/08/2007

KRATON POLYMERS U.S. LLC
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EXAMINER

JOHNSON, CONNIE P

ART UNIT

PAPER NUMBER

1752

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

✓

Office Action Summary	Application No. 10/518,985	Applicant(s) MULDERMANS ET AL.	
	Examiner Connie P. Johnson	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 13 December 2006.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 11-14 and 17-28 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 11-14 and 17-28 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)

Office Action Summary

Part of Paper No./Mail Date 20070227

DETAILED ACTION

Response to Amendment

1. The remarks and amendment filed 12/13/2006 have been entered and fully considered.
2. Claims 11-14 and 17-28 are presented.
3. The 103(a) rejection has been withdrawn.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 19, 21 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 is dependent upon claim 16, which is cancelled.

Response to Arguments

6. Applicant's arguments, see pages 8-13, filed 12/13/2006, with respect to the rejection(s) of claim(s) 11-14 and 17-28 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Heintz et al., U.S. Patent No. 4,320,188.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11-14 and 17-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Victor et al., U.S. Patent No. 6,127,094

Victor teaches a photopolymerizable composition for use in flexographic printing plates (abstract). The composition comprises an elastomer forming monomer in an amount of 25-95 mol% and a photopolymerization initiator at 0.01 to 20 wt %. The composition also has a support that comprises polyethylene terephthalate (col. 12, line 17). The photopolymerizable composition may also produce a resin relief plates for flexographic printing (col. 11, lines 55-60). Victor also teaches optional linear polymers for inclusion in the block copolymer component of the photopolymerizable composition. The composition also comprises up to 50 wt% of a thermoplastic elastomeric block polymer having a general formula of A-B-A, wherein A is a non-elastomeric polymer block with a molecular weight of 2,000 to 100,000 and B is an elastomeric polymer block having a molecular weight of 25,000 to 1,000,000 and a glass transition temperature below 10⁰C (col. 3, line 45-col. 4, line 9). Victor also teaches an ethylenically unsaturated monomer in an amount of 5 to 70 wt% in the composition. Suitable ethylenically unsaturated compounds are polyfunctional vinyl monomers such as methacrylic acid, acrylic acid and trimethylolpropane tri(meth)acrylate (col. 4, lines

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45-67). The block copolymers may comprise isoprene and butadiene (col. 7, lines 51-65). Although Victor teaches block copolymers in an amount of 10 to 50 wt% in the composition, he does not specifically teach that the block copolymers are present in an 20/80 to 80/20 of isoprene/butadiene. However, it would have been obvious to one of ordinary skill in the art to use the isoprene and butadiene in a copolymer mixture of 20/80 to 80/20 because Victor teaches combining linear polymers, such as isoprene and butadiene to form water-resistant resin compositions after photopolymerization (col. 3, lines 20-38 and col. 8, lines 1-25).

9. Claims 11, 12, 13, 14, 20, 21, 22, 23, 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al., U.S. Patent No. 4,369,246 as evidenced by Holden, U.S. Patent No. 3,265,765.

Chen teaches photosensitive elements comprising a layer with a solvent soluble thermoplastic, elastomeric, block copolymer, an ethylenically unsaturated compound and an addition polymerizable initiator (abstract). The block copolymer has the formula A-B-A (col. 3, line 57). The block copolymers also have a glass transition temperature of less than 10⁰C and have a molecular weight of 25,000 to 1,000,000 (col. 4, lines 16-17). The block copolymers are present in an amount of at least 30% by weight (col. 2, line 15). Further, the polymerizable initiator is present in an amount of .001 to 10% by weight or more (col. 6, lines 1-4). Suitable amounts of the ethylenically unsaturated compound are at least 1% by weight (col. 2, line 25). The photosensitive composition also comprises a support and a coversheet. In examples XI and XIII, Chen discloses the

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use of a polyethylene terephthalate support (col. 16, lines 2-6). Chen also teaches an antihalation layer (col. 10, line 5). The photosensitive elements are used in flexographic printing. The photosensitive elements may also comprise block copolymers of polystyrene-polyisoprene-polystyrene (SIS) or polystyrene-polybutadiene-polystyrene (col. 4, lines 37-44). Although Chen teaches the A-B-A formula for block copolymers in the composition, he does not specifically teach that the block copolymers comprise isoprene and butadiene in amounts of 20/80 to 80/20. Segment B of the formula may comprise a monomer mixture as disclosed in column 4, lines 25-34 of Chen. The specific block copolymers for segment B are disclosed in Holden, U.S. Patent No. 3,265,765. In column 4, lines 15-20 and 32-35, Holden teaches that the elastomeric mid section of the polymer block comprises monomer mixtures of isoprene and butadiene. It would have been obvious to one of ordinary skill in the art to use the isoprene and butadiene block copolymers in the composition of Chen to form suitable mid sections of the elastomeric composition as evidenced by Holden.

Conclusion

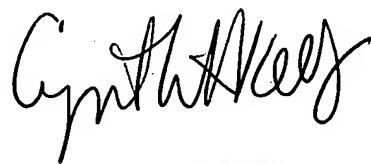
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Connie P. Johnson whose telephone number is 571-272-7758. The examiner can normally be reached on 7:30am-4:00pm Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Connie P. Johnson
Examiner
Art Unit 1752



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